

## AMENDMENTS TO THE CLAIMS

Please **CANCEL** claims 10-13 and 17-30 without prejudice or disclaimer.

Please **AMEND** claim 1 as shown below.

Please **ADD** claim 31 as shown below.

The following is a complete list of all claims in this application.

1. (Currently Amended) A method of manufacture of a micro-perforator, comprising:

providing a solidifiable material, and forming the solidifiable material, optionally in admixture with a diagnostic or therapeutic agent into a desired micro-perforator shape;

wherein the step of forming the solidifiable material includes a step of solidifying the solidifiable material such that the solidified material in the desired micro-perforator shape has a plurality of pores that optionally comprise the diagnostic or therapeutic agent; and

optically contacting the solidified material in the desired micro-perforator shape with the diagnostic or therapeutic agent such that the diagnostic or therapeutic agent is at least partially enclosed in the plurality of pores,

wherein the solidifiable material shrinks during the step of solidifying the solidifiable material, and

wherein shrinking of the solidifiable material is controlled by one of formulation of the solidifiable material and drying the solidifiable material to reduce an apex angle of the micro-perforator.

2. (Original) The method of claim 1 wherein the solidifiable material comprises a sol/gel material.

3. (Original) The method of claim 2 wherein the sol/gel material further comprises the diagnostic or therapeutic agent.

4. (Original) The method of claim 3 wherein the step of forming comprises a step of filing the sol/gel material into a mold to which a force is applied to improve settling of the sol/gel material into the mold, and wherein the step of forming is performed at ambient temperature.

5. (Original) The method of claim 2 wherein porosity of the solidified sol/gel material is controlled via adjustment of the pH in the unsolidified sol/gel material.

6. (Original) The method of claim 1 wherein the solidifiable material comprises a sinterable material.

7. (Original) The method of claim 6 wherein the sinterable material further comprises the diagnostic or therapeutic agent.

8. (Original) The method of claim 6 wherein porosity of the solidified sinterable material is controlled via at least one of pressure, particle size and temperature during the step forming the solidifiable material.

9. (Original) The method of claim 1 wherein the solidifiable material comprises a gelling agent or a viscous material, and wherein the step of forming the solidifiable material includes a step of removing air bubbles from the gelling agent or viscous material using positive or negative pressure.

10-13 (Canceled).

14. (Original) The method of claim 1 wherein the solidified material in the desired micro-perforator shape that optionally comprises the diagnostic or therapeutic agent dissolves in a skin of a person over a predetermined period when applied to the skin.

15. (Original) The method of claim 14 wherein dissolution of the micro-perforator is completed in less than one day.

16. (Original) The method of claim 1 further comprising a step in which the solidified material is the desired micro-perforator shape is contacted with a second solidifiable material, and in which the second solidifiable material is formed into a desired micro-perforator shape to provide a laminated micro-perforator.

17-30. (Canceled).

31. (New) A method of manufacture of a micro-perforator, comprising:

providing a solidifiable material, and forming the solidifiable material, optionally in admixture with a diagnostic or therapeutic agent into a desired micro-perforator shape;

wherein the step of forming the solidifiable material includes a step of solidifying the solidifiable material such that the solidified material in the desired micro-perforator shape has a plurality of pores that optionally comprise the diagnostic or therapeutic agent; and

optically contacting the solidified material in the desired micro-perforator shape with the diagnostic or therapeutic agent such that the diagnostic or therapeutic agent is at least partially enclosed in the plurality of pores,

wherein the solidifiable material comprises one of a gelling agent and a viscous material, and the step of forming the solidifiable material includes a step of removing air bubbles from one of the gelling agent and viscous material using positive or negative pressure.